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A Note on Recent Age-Pyramids in Underdeveloped Countries

A COMFORTABLE DOCTRINE NOW accepted by those concerned with aid to underdeveloped countries is that once higher standards of living are raised, birth rates will fall, so to speak, automatically without worrying about measures of birth control. In the words of a letter from the Warden of Toynbee Hall to *The Times*, May 2nd, 1964: "One certain way to bring about a fall in the birth rate is by a rapid rise in living standards." This doctrine is based not on actual experience in the underdeveloped countries but mainly on a doubtful analogy with the very different conditions prevailing in England and Western Europe in the nineteenth century. I do not wish to dispute here whether, without birth control, higher standards can ever be reached or whether, if so, sociological "motivations" will really overcome ignorance and carelessness. This note is written to draw attention to a much more concrete factor—demographic not psychological—which is about to create a second-wave population explosion, higher standards or not. This factor is the "bulge" in the underdeveloped countries' population under ten years old.

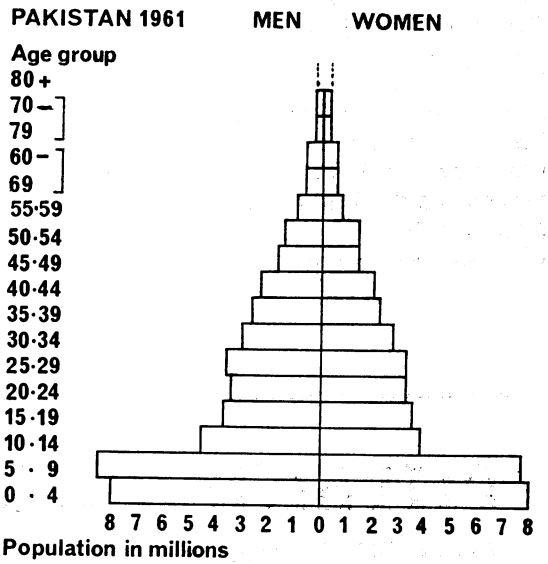

FIGURE 1
PAKISTAN, 1961
(U.N. *Demographic Yearbook*, 1963)

I must admit to not realizing the extent of this bulge, far exceeding our own teen-ager bulge now approaching the Universities, till, in writing a book on visual aids, I put the Pakistan age pyramid on to paper. To accommodate its astonishing number of under-tens I had, in fact, to gum on extra bits of paper to my original lay-out. Figure 1 is the pyramid in question.

To be fair, this age pyramid should be compared not to the English pyramid of to-day, in spite of our rising birth rate, but to that of 1871, the Census year around which English birth rates were at their peak. Incidentally, those who have faith in European analogies should note that it took a full hundred years of industrialization to reduce the English birth rate at all.

The English age pyramid for 1871, shown below as Figure 2, has a smooth pyramidical shape with no sudden bulge at ages 0–9. No age group younger than fifty-five was 20 per cent more numerous than the next oldest age group. But in Pakistan in 1961, the group aged 5–9 was over 70 per cent more numerous than the group aged 10–14 and the "double" group aged 0–9, 100 per cent more numerous than the double

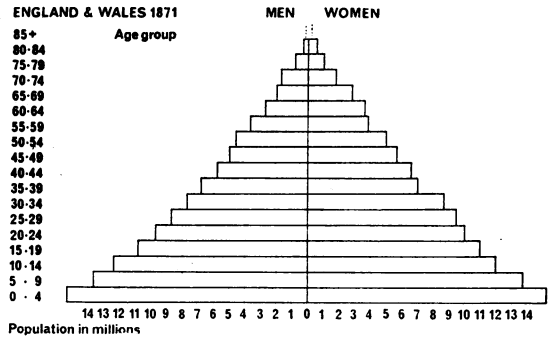

FIGURE 2
ENGLAND AND WALES, 1871
(Mitchell: *Abstract of British Historical Statistics*)

group aged 10–19. The analogy, so comfortably drawn, between a possible automatic birth rate fall in underdeveloped countries, and the actual fall after 1871 in England is obviously built up somewhat artificially on a very different age structure.

Is this Pakistan pyramid typical, however, of underdeveloped countries generally? To test this, I referred to all large underdeveloped countries with a population over twenty-five million whose age distributions for 1960 or later are published in the U.N. *Demographic Yearbook* for 1963. Besides Pakistan, they comprise Indonesia, the Philippines, Thailand and Mexico.

The age pyramids for these four countries given below as Figures 3 to 6 show the same general form as that for Pakistan. A short test of this similarity is to divide the number of 0–9-year-olds by the number in the ten-year group central to the "parent" generation—i.e. the group aged of 25–34.* This inter-generation, or "quarter-century on," ratio was for Pakistan 2·47. The under-ten-year-olds were about two-and-a-half times the number of twenty-five to thirty-five-year-olds. For Mexico in 1960 the ratio was 2·43, for both Thailand and Indonesia in 1961 it was 2·15 and for the Philippines 2·60. For England and Wales in 1871 it was only 1·73, in 1961, only 1·22.

The pyramids differ in certain respects: Indonesia, for instance, has a particularly ragged outline in its "middle ages." But the pyramids of all the five underdeveloped countries agree in showing the bulging basement.

The implications of this vast bottom bulge, if I may use that expression, to future population hardly need stressing. When the 1960 0–9-year-olds become 15–24-year-olds, as they will begin to do in 1966, we may expect a really sharp increase in gross birth rates. Hitherto, the population explosion has not (taking underdeveloped countries as a whole) been due to a rise in birth rates. It has been the result of a steep fall in death rates, particularly infant mortality—a degree of fall with no precedent in the supposed European analogy. Now, however, we shall have to reckon both with a fall in gross death rates, due to a still improving death control and to the younger age structure of the population, AND with a rise in gross birth rates.

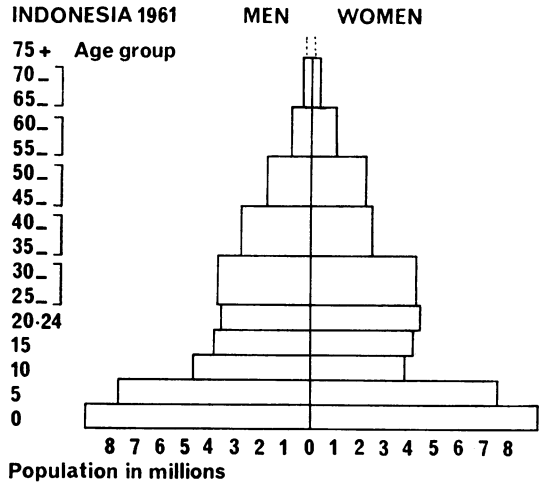

FIGURE 3
INDONESIA, 1961
(U.N. *Demographic Yearbook*, 1963)

* Some countries, for instance Indonesia, do not separate persons aged twenty-five to twenty-nine or give data for those aged twenty to twenty-nine; hence the greater convenience of the age groups twenty-five to thirty-four as a datum line.

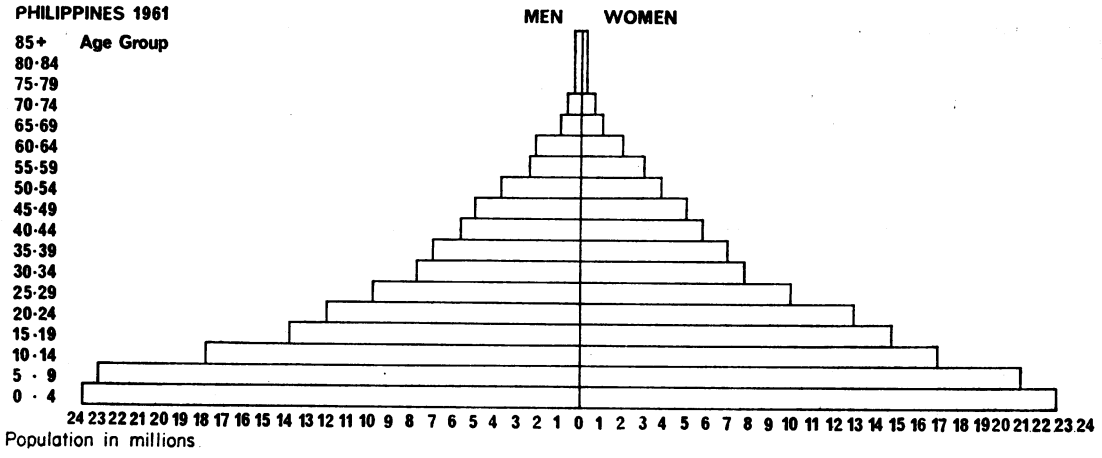

FIGURE 4
THE PHILIPPINES 1961
(U.N. *Demographic Yearbook*, 1963)

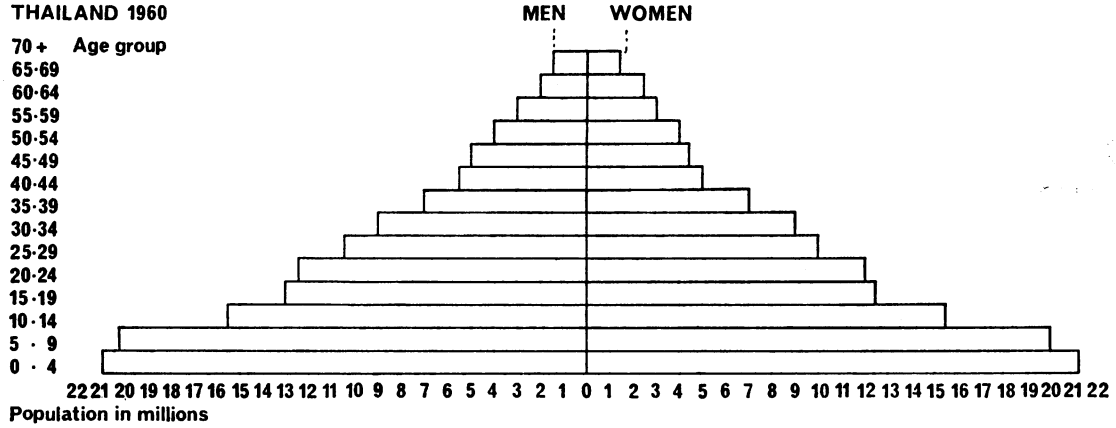

FIGURE 5
THAILAND 1960
(U.N. *Demographic Yearbook*, 1963)

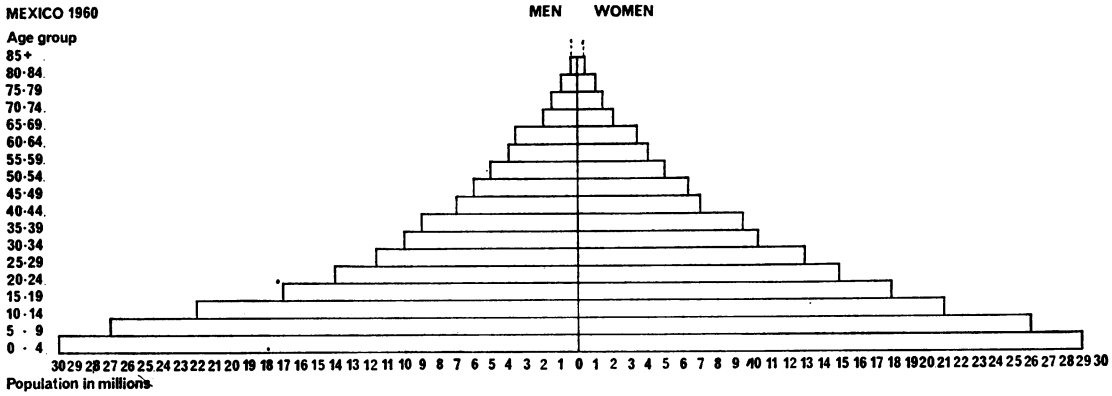

FIGURE 6
MEXICO, 1960
(U.N. *Demographic Yearbook*, 1963)